



Discussion on Developing Higher Vocational Education at Undergraduate Course Level in Shandong Province

Xiaomin Zhang

Department of Mathematics, Linyi Normal University, Linyi 276005, China

E-mail: lygxxm@tom.com

This paper is an early fruit of the Shandong vocational education and adult education's "11th five-year" planning project (No.2006LY004) "Develop Higher Vocational Education at Undergraduate Level".

Abstract

To develop higher vocational education at undergraduate level is to meet the objective needs for modern economic development. It is an inevitable requirement for perfecting the higher vocational education structure in China and also an urgent need for the popularity of higher education in China. This paper discusses the definition of higher vocational education's connotation and the school-running orientation, analyzes the present situations of higher vocational education in Shandong, puts forward the tactics and ways for developing higher vocational education at undergraduate level in Shandong province.

Keywords: Higher vocational education, Undergraduate course level, Shandong province

Social development and scientific and technological progresses bring about continuous changes for human being's production activities. At different times, conditions of production activities determine social requirements for professions and labor divisions, which in turn determine the requirements for types of talents, and further determine the education structure. Since the reform and opening, China economy develops fast. The modernization in certain regions and industries reaches a higher degree. Especially after China's WTO entry, facing an open global economic system, China's economic structure should be adjusted extensively according to the requirements of the new times, which will directly lead to the emergence of amounts of occupations based on the high-tech industry. These new occupations demand for higher and more technologies. Technologists in these occupations should not only master comprehensive specialty theories, but also know the practical operation of high technologies and advanced equipments. Therefore, to properly develop higher vocational education at undergraduate level is to meet the objective need. Meanwhile, it is meaningful to drive the popularity of higher education and perfect the structure of China's higher education.

As a well-developed economic province, Shandong's economic structure has gained fast development during the "11th five-year" period. In the "11th five-year" plan, Shandong aims at building a strong economic province, especially strengthening the modern manufacture and new industrial development, realizing the adjustment of industrial structure and the conversion of economic growth modes. The actualization of peninsular city group strategy, the expedition of urbanization, and the transfer of rural labors need to speed up the development of higher vocational education and training, what means more requirements for the quality and scale of higher vocational education. Therefore, to develop higher vocational education at undergraduate level is on the agenda. More and more people realize its importance. Presently in Shandong province there are 69 independent higher vocational colleges. The students in higher vocational colleges account for more than 50% of total students in higher colleges, so does the planned enrolling students in Shandong province. Higher vocational education has already taken on greater responsibilities for Shandong's higher education. However, in the author's opinion, Shandong's higher vocational education does not clearly establish the objectives of training, levels and orientation of running schools, and direction of development.

1. The definition of higher vocational education's connotation and school-running orientation

1.1 The definition of higher vocational education's connotation

Higher vocational education is an important component of higher education, which is a higher stage of vocational education, with the dual property of both higher education and vocational education. The so-called property of higher education means higher education in the educational aspect. Higher vocational education is relative to primary and middle vocational education, emphasizing on the vertical orientation in training objectives. The so-called property of vocational education means it aims at training technology-applied talents whose knowledge and ability structure stress on the special vocational orientation. Higher vocational education is to cultivate technology-applied talents who master necessary theoretical knowledge, possess stronger abilities in practice, and can adapt to the front needs in production,

construction, management, and service.

Higher vocational education can provide specialized education, undergraduate education, and master education. In the International Standard Classification of Education edited by the United Nations Educational, Scientific and Cultural Organization (UNESCO), the whole education system is divided into seven levels. The fifth level is the first stage of higher education, including the 5A type and the 5B type. The 5A higher education emphasizes on theories and helps to prepare for researches and high-tech professional jobs, while the 5B higher education on practices, techniques, and specialized vocations. Both can include many levels, such as specialized education, undergraduate education, and master education. The essential difference between higher vocational education and other education is the students' difference in types, instead of levels.

1.2 The orientation of higher vocational education's training objectives

The Ministry of Education, in its suggestions for enhancing the talents cultivation in higher vocational education, points out: "higher vocational education is an important component of China's higher education; cultivate all-round developed and high-tech applied talents who insist on the party's basic line, and meet and frond need of production, construction, management, and service; students should control necessary theoretical and specialized knowledge, especially the primary abilities and techniques needed in real work; they should keep better professional morals and dedications." In a word, higher vocational education is a kind of technological and vocational education based on the high school education, with property of higher education. It aims at cultivating all-round developed technology-applied talents and high-tech talents who meet the front needs of production, business, and service, in order to catch up with the international competition.

2. The present conditions of Shandong's vocational education

Since in 1999 China determines to expedite the development of higher education, the scale of higher vocational education in Shandong province has gained fast development. The students in higher vocational colleges account for more than 50% of total students in higher colleges, so does the planned enrolling students in Shandong province. Higher vocational education has already shouldered greater responsibilities for Shandong's higher education, contributing a lot to the popularity of higher education in Shandong province. The school-running idea, taking the service as the tenet, and employment as direction, has come into being. Some common colleges provide with higher vocational education at undergraduate level. Problems as follow still exist in two aspects.

(1) Inexact orientation of training objectives. The higher vocational education at undergraduate level is a new-developed thing in recent years in Shandong province. At present, the higher vocational education at undergraduate level is still at an exploring and experimenting stage. The different understandings toward higher vocational education at undergraduate level lead to inexact orientation of training objectives, without special characteristics. In practices, there are two trends: firstly, take the higher vocational education at undergraduate level as four-year specialized higher vocational education, simply enriching and expanding former specialized higher vocational education's training plans, running the higher vocational education at undergraduate level according to ideas and directions of former specialized higher vocational education; secondly, take the higher vocational education at undergraduate level as common higher education. The two trends can not embody the uniqueness of higher vocational education at undergraduate level, which make it fail to exert its effects on cultivating high-tech applied talents, and even lose its values. Meanwhile, the two trends will impact the whole development of higher vocational education negatively.

(2) No colleges provide with higher vocational education at undergraduate level in Shandong province.

According to the International Standard Classification of Education edited by the United Nations Educational, Scientific and Cultural Organization (UNESCO), higher vocational education should provide specialized education, undergraduate education, and master education. In the school aspect, colleges should provide with higher vocational education at undergraduate level. However, it is still an absence in Shandong province, which does not match the economic and social development in the province. Therefore, it is urgent for us to perfect Shandong's higher vocational education structure and construct one or even more colleges based on higher vocational education mode.

3. Ways and measures for developing Shandong's higher vocational education at undergraduate level

(1) Scientific orientation

Higher vocational education at undergraduate level is a kind of applicable higher education. It follows the Ministry of Education's Suggestions for Deepening the Employment-Oriented Reform of Higher Vocational Education, taking service as the tenet, social needs and employment as the direction, learning advanced school-running ideas and experiences from foreign countries, insisting on the close cooperation of industry, university, and research institutes, cultivating the high-tech and managing- applied special talents who meet the front needs of different industries with excellent vocational competence, super specialized techniques, strong innovation consciousness, and sustaining study potentials, and making them possess life-long learning ideas and sustainable development potentials.

(2) Change the education thoughts and renew education ideas

To renew the education ideas should serve as the forerunner of all innovations. Advocate building up healthy and positive professional values and ignoring the difference between vocational education and academic education. Set up a mutual recognition between degrees and vocational qualities and make vocational education become an important ring in the life-long study net. At present, in a sense people may despise technological training. They unilaterally value the undergraduates and graduates cultivated in common higher colleges. Amounts of education resources are input in theoretical education. Vocational education faces lots of difficulties in development. In order to change this thought, governments at different levels should begin from the practical needs of economic and social development and the construction of modern citizen education system, take the development of higher vocational education at undergraduate level into the general plan of local economic and social development, perfect relevant policies and regulations, allocate education resources reasonably, enhance their support, and make vocational education develop nicely as soon as possible. Colleges should insist on the directive thought "service as the tenet, employment as the direction, capability as the root", for the sake of market and society, drive the close cooperation between teaching and production practice, between technology extension and social service, and turn the traditional education mode into the employment-oriented mode as soon as possible. Besides, colleges should positively make innovations for the school-running mode, emphasize on practices in teaching, adjust the structure of specialties, deepen the reform of curriculum, and cultivate students' practical capabilities and specialized techniques in order to meet the market needs.

(3) Reform traditional common colleges and perfect higher vocational education system

At present, some common colleges in Shandong province are close to higher vocational colleges in talents training, especially for some engineering colleges. In author's opinion, this kind of colleges can be reformed into higher vocational colleges at undergraduate level according to local economic development needs, enhancing students' professional technique training, and meeting the social needs for higher vocational talents at undergraduate level. On the other hand, although some colleges in Shandong province set up higher vocational schools, most are at the specialized level. The author thinks that to cultivate higher vocational students at undergraduate level in common colleges is sort of to repeat the way of other higher vocational colleges. It can not make best use of the special advantages of common colleges. The best way is to transform the common colleges' higher vocational schools into higher vocational colleges at undergraduate level, giving up the specialized vocational colleges.

(4) Turn some influencing specialized vocational colleges in Shandong province into higher vocational colleges at undergraduate level.

At present, there are 69 independent higher vocational colleges. Turn some specialized vocational colleges into higher vocational colleges at undergraduate level is good for the development of higher vocational education in general. But the approval of transformation should be examined strictly. Whether approve the transformation or not is determined by practical needs of local economic development and conditions of colleges. After the transformation, new higher vocational colleges should insist on the way of higher vocational education, establishing the development orientation clearly, and never think about the idea of comprehensive and academic college education.

(5) Enhance the construction of teaching staff and cultivate "double-type" teachers

Considering characteristics of higher vocational students at undergraduate level, teachers should not only possess strong theoretical knowledge, but also have rich practical experiences. They should firstly absorb and assume the knowledge of production, management, and service, and then convey and teach their students effectively. In a sense, they are "double-type" teachers. Therefore, it is necessary to enhance the construction of teaching staff. Select colleges that are competitive in higher vocational education field, in which establish training bases for higher vocational teachers. The emphasis is to cultivate young teachers' teaching techniques and vocational consciousness, cultivating more backbone "double-type" teachers, and driving the improvement of higher vocational education at undergraduate level.

(6) Strengthen the construction of experiment and training bases

Higher vocational colleges at undergraduate level should rely on industries, local governments, and enterprises, and construct training centers in colleges and outside, striving for constructing several provincial standard training and experiment centers in higher vocational colleges at undergraduate level, and cultivating high-tech applied talents.

References

- Bao, Jie. (2004). *Exploration and Practice on Reform of Higher Technological & Vocational Education in New Century*. Beijing: Higher Education Press.
- Chen, Jiefang. (2005). Learning from international experience concerning nurturing applicable talents. *Journal of Beijing Union University (Natural Sciences)*. No.19(2).
- Pan, Maoyuan. (2004). My views on higher vocational education ----- a speech in the "Fourth Annual Academic Conference by National Higher Vocational Education Association of Colleges". *Vocational and Technological*

Education. No.18.

Shi, Weiping. (2001). *Comparative Vocational and Technological Education*. Shanghai: East China Normal University Press.

Wu, Aihua. (2005). Twenty years of higher education and teaching reform in European countries. *China University Teaching*. No.3.